Date: Tue, 28 Sep 93 12:05:24 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1150
To: Info-Hams

Info-Hams Digest Tue, 28 Sep 93 Volume 93 : Issue 1150

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 28 Sep 1993 14:09:08 GMT
From: brunix!pstc3!md@uunet.uu.net
Subject: 6 weeks 1 day!
To: info-hams@ucsd.edu

In article <1993Sep28.125830.900@rsg1.er.usgs.gov>, bodoh@dgg.cr.usgs.gov (Tom
Bodoh) writes:

|> Jeez... I got mine just three weeks ago and had to wait twelve weeks! Anybody
|> know how the FCC has cut the time? Did they just catch up on the summer

|> rush or did they change something? Maybe they "lost" a few thousand apps...

It all depends on how the exams are processed.

When my wife took her Novice, the form was mailed directly to the
FCC in Gettysburg. She had her ticket less than a month later. The completed
610 was mailed on May 27th, and she had her license in hand on June 21st.
(It had been processed around June 18th).

Contrary to statements made, I believe the inefficiencies are within the
VEC system, not within the FCC's processing. All that paperwork must be
checked, your name and address entered into a computer so your name can
be sold to HRO and AES, and *THEN* your upgrade paperwork gets forwarded
to Gettysburg.

MD
--
-- Michael P. Deignan
-- Population Studies & Training Center
-- Brown University, Box 1916, Providence, RI 02912
-- (401) 863-2668

Date: Tue, 28 Sep 1993 12:58:30 GMT
From: swrinde!cs.utexas.edu!usc!howland.reston.ans.net!darwin.sura.net!
rsg1.er.usgs.gov!dgg.cr.usgs.gov!bodoh@network.ucsd.edu
Subject: 6 weeks 1 day!
To: info-hams@ucsd.edu

In article <1993Sep27.225242.4563@news.uiowa.edu>, drenze@icaen.uiowa.edu (Douglas
J Renze) writes:
|> Took the exam on 15 Auguest. License issued 21 September. Arrives in mail,
|> 27 September. Total elapsed time since the CSCE got into my hot little hands,
|> 6 weeks 1 day 0 hours 25 minutes!
|>
|> Doug, N0YVW

Jeez... I got mine just three weeks ago and had to wait twelve weeks! Anybody
know how the FCC has cut the time? Did they just catch up on the summer
rush or did they change something? Maybe they "lost" a few thousand apps...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT   +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198   (605) 594-6830   +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)
          +

+   "Welcome back my friends to the show that never ends!" EL&P
          +
++

Date: Tue, 28 Sep 1993 12:54:09 GMT
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!agate!
howland.reston.ans.net!sol.ctr.columbia.edu!emory!kd4nc!ke4zv!
gary@network.ucsd.edu
Subject: Audio output/Freq low/Hamcomm PROBLEMS
To: info-hams@ucsd.edu

In article <1993Sep27.191413.1@ccsua.ctstateu.edu> white@ccsua.ctstateu.edu
writes:
>
>Friends
>I have a Kenwood R1000 communications receiver that I am trying to use
>with the HamComm CW/RTTY and JVFAX programs. I built the simple 741-based
>interface for the PC's serial port. Problem is that the programs require a
>signal of 500Hz-2500Hz, and my system is apparently delivering 100Hz.
>Is there any way that I could boost the frequency?? I obviously am not
>well-schooled in electronics :(

I'm not sure I understand your problem. If you want a tone of a particular
frequency, just tune the radio until that frequency tone comes out.
Somehow that sounds too obvious, so you must mean something else.

>The signal at 100Hz on the 'scope onboard HamComm follows the morse code
>that I can hear on the R1000's speaker precisely; I just need to nudge it
>up to 500 Hz. Also, tuning noise, etc will show up across the spectrum.
>I have been advised to try to use the RS 1K ohm center tap - to - 8 ohm
>audio output transformer, but am unsure about how to hook it up (3 leads on
>the 1K center tap side, 2 on the 8 ohm side) and I also don't want to
>damage the R1000.....

Are you saying that no matter what frequency you tune the radio to, you
always see 100 Hz on the spectrum display? If so, your interface circuit
is falsing, perhaps due to a ground loop. This thing works by counting
zero crossings. It sounds like what you're getting is modulated AC hum
into the interface. What people are telling you about the transformer is
that you want to use it as a step up transformer to match the speaker
output to the 741 circuit. To do that, you hook the 2 leads on the 8 ohm
side to the speaker terminals of your radio, and the outside two wires on
the secondary side to the 741 circuit. If you do this, you'll break
any ground loop that may exist between your radio and your interface. This
is a good thing. You'll also boost the voltage seen by the 741. You should
be careful not to run the volume too high on the radio when you do this

or you can overdrive the chip. You won't hurt your radio by doing this.

Gary

--
Gary Coffman KE4ZV | "If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

Date: 28 Sep 93 06:32:46 GMT
From: ogicse!uwm.edu!spool.mu.edu!howland.reston.ans.net!usc!cs.utexas.edu!not-for-mail@network.ucsd.edu
Subject: DATAPOINT: Exams -- Backlog cleared?
To: info-hams@ucsd.edu

Passed General: 6/12/93
Received Ticket: 8/28/93
Elapsed time: 77 Days (!!)

Passed Advanced: 7/10/93
Faxed General to
ARRL/VEC: 8/30/93
Received Ticket: 9/27/93
Elapsed time: 28 Days

73,
Peter Laws
N5UWY - V31WY

President,
Amateur Radio Club,
University of Arkansas / W5YM

Peter Laws <plaws@comp.uark.edu> | "That's the President of the United States
n5uwy@ka5bml.ar.usa.noam | you're talking about, pinhead."-VP Al Gore

---

Date: Tue, 28 Sep 93 02:21:40 GMT
From: mercury.hsi.com!a3bee2.radnet.com!cyphyn!randy@uunet.uu.net
Subject: Finland Crystals 1 year wait
To: info-hams@ucsd.edu

I lost the artical and the email from someone in Finland, who ordered

crystals from CW Crystals W0LPS.

He *is* still in business...but is swamped with orders and is having
a hard time catching up....I guess he's 1 year behind.

You might write a letter to see how close he is to your order, but be nice,
cuz it's only him and his wife doing all that.

I, myself, will just sit and wait. In meantime, if speedier and more
modern crystals are needed...there's Jan and ICM and Bowmar.

73
--
Randy KA1UNW   If you get a shock while
                         servicing your equipment,   "Works for me!"
randy@192.153.4.200   DON'T JUMP!   -Peter Keyes
                      You might break an expensive tube!

Date: Tue, 28 Sep 1993 05:03:56 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!
news1.boi.hp.com!riyadth@ames.arpa
Subject: Got 'em!
To: info-hams@ucsd.edu

Hello,

    Just had to let the country know that my wife and I just received
our Technician licenses in the mail today. Test taken 8/8/93, license
effective 9/21/93, postmarked 9/24/93. She's now KB7YWD, and I'm KB7YWE.
That's 7 weeks and 1 day... (and this was through the ARRL/VEC).

--
{ Riyadth Al-Kazily   KB7YWE   DoD #295 '83 BMW R65 '77 Volvo 242DL }
{ riyadth@boi.hp.com | When am i going to have time to use all this   }
{ (208) 396-4987 | stuff I'm collecting? More important, how can   }
{ Boise, Idaho | I get more stuff? Amiga 500+ (+ stuff, that is) }

Date: 28 Sep 93 12:42:30 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: How to Measure Q
To: info-hams@ucsd.edu

In article <CE11Iw.91@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>William E Van Horne (wvanhorn@magnus.acs.ohio-state.edu) wrote:

>: Advertisements by MFJ running in current magazines include
>: their model MFJ-203 Dip Meter. The ad claims that one can
>: "Measure Q of coils" using it. I have a grid-dip meter, but
>: sure don't know how to use it to measure Q of coils. Can
>: anyone enlighten me?
>
>: ... Or what other effect am I missing?
>
>I don't think you are missing anything. You can get a very rough
>subjective estimate of Q by how deep the dip is on the dip meter.
>But to say you can "measure the Q of coils" is a pretty far stretch,
>even by advertising standards.

Well, if the dip meter has a trustworthy dip indicator, and has a
drive port for a frequency counter, you can get Q by knowing that
Q=Fo/BW where Fo is the frequency of maximum dip and BW is the
width to the 3 db points on either side of max dip. For example,
if dip occurs at 1 MHz and the dip indicator shows a 1/2 power
change at +/- 10 kHz, then the Q is 50. Obviously you need to
use a high Q capacitor across the inductor to achieve resonance.
Normally the capacitor's Q will be high enough that only the
Q of the inductor is being measured.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

Date: 28 Sep 93 17:26:07 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu
Subject: How to Measure Q
To: info-hams@ucsd.edu

To measure the Q of a tank, you can't expect to simply
monitor the dip meter's deflection. The deflection
depends heavily on coupling between the tank in the
dip meter itself and the tank under test. Besides,
the meter movement on the dip meter is not necessarily
measuring "half power points" when it drops to half
of the "normal" reading.

A way that you could use the dipper to get a decent
estimate of Q: arrange the dipper to have a fixed position

with respect to the tank being measured; arrange to monitor
the dipper frequency (or for low q, the dipper dial may
be fine). Couple the dipper to the tank _lightly_.
Monitor the RF voltage across the _tank_being_measured_,
with a circuit which won't load that tank significantly
(tough, if the Q is high!). Tune the dipper to max voltage
in the tank under test, then above and below to the 1/2
power points (.707x peak voltage). Center freq/BW=Q.
However, even this is subject to problems: many dippers,
particularly at higher frequencies, aren't very "flat"
in amplitude with changes in frequency. (You could get
away from that by changing the freq of the tank being
measured instead, if it includes a means of tuning.)

Date: 28 Sep 93 15:59:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: Looking for a serious rotator for a serious antenna.
To: info-hams@ucsd.edu

Here's the scoop..

Here at work we're putting in an aircraft HF comm ground station. A few weeks
ago, there was a posting here about a 6-30 MHz log periodic for sale and
management agreed it was a wonderful idea and gave the HF guys the go ahead to
procure the antenna. that's in process - so far so good.

New problem. We're going to need the serious rotator for the serious antenna
(antenna is a Hy-gain LP1017C i believe and calls for something like the
Hy-Gain 3501 rotator).

Should you, the reader, have such a beast available or can point us in the
right direction, Ray Adams, K7MLE, at Collins Commercial Avionics in
Melbourne, FL, would like to hear from you. Normal business hours are
7:30-4 ET.

Phone is (407) 768-7049 (xfers to secretary after 4 rings) or you can try
e-mail at rfa@dllws.cca.cr.rockwell.com or rfadams@crems.cr.rockwell.com.
(things have been a bit strange on intersystem e-mail lately...that's why
i'm posting this.) Street address for snail mail is:

    Ray Adams
    Mail Station 305-100
    Collins Commercial Avionics
    Rockwell International
    600 John Rodes Blvd.
    Melbourne, FL 32934.

thanks and 73,

bill wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com

Date: 28 Sep 93 12:56:56 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: New license question
To: info-hams@ucsd.edu

In article <1993Sep28.000824.5862@news.uiowa.edu> drenze@icaen.uiowa.edu (Douglas J Renze) writes:
>A quick question about something that's confusing me. I just got my ticket
>in the mail today. Under operator priileges, it sas "technician." On my
>CSCE, it said I passed my exam and earned "Technician w/HF." My questions:
>(1) Does the FCC differentiate on the Technician-class licenses between
>Tech No-code and Tech/HF? (2) If not, or if so and my license is in error,
>do I have to identify with the "/KE" when I use my HF privs? (3) If so and
>there is an error on my license, whom do I contact?

No, the FCC doesn't differentiate between Tech and Tech w/HF. You have
to keep your CSCE forever, or until you upgrade again, to show that you
have HF priviledges. The VEC has a record of your CSCE and the FCC will
query them if they have a question about your HF operation.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

Date: 28 Sep 93 13:03:48 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: Regenerating PL tones thru a repeater.
To: info-hams@ucsd.edu

In article <CE1FF6.18u@ced.utah.edu> mladejov@ced.utah.edu writes:
>Hi
>Looking for some net.wisdom on how to regenerate one of several PL
>tones through repeaters. I am building several VHF repeaters, each of
>which needs to decode one of several PL tones, let's say 100.0, 110.9

>and 123.0Hz, and then if any of these three is detected (but not any
>other PL tone), it keys the transmitter, and enables the matching PL
>encoder so that the respective PL tone is passed out of the
>transmitter.
>
>Obviously this could be done with three or more PL decoders, and three
>or more PL encoders at each repeater site. I am looking for a solution
>where there is one general-purpose PL tone decoder, which is capable
>of determining of what tone is being sent "on the fly" (like a
>period-measuring freq counter), which produces an output which says
>which PL tone is being detected. (Kind of like a PL "scanner").
>
>I plan to interface this scanning PL decoder to a micro-computer, and key
>the transmitter only if the PL code matches one stored in a table. The
>regeneration could be taken care of by having the uP load a byte into
>the frequency determining register on a single gen-purpose PL encoder
>(ie, replace the dip switches with a latch).
>
>So, anybody have any ideas on how do do this short of buying three or
>more decoders and three or more encoders per site? Alternatively, how
>about a source of lots of cheap PL decoders, or a cheaply-reproduceable
>chip-based PL decoder based on an IC chip.

Well multiple decoders will give the fastest response time, but you
can program the microprocessor to *scan* the input by writing the
proper bit sequence to the decoder's dip switch. The only down side
to this is that you have to scan relatively slowly to allow the
decoder time to lock on any particular PL. This is a good application
for DSP. A FFT of the 50-150 Hz region of incoming audio will show
what PL is active. You might even get away with a simple zero crossing
detector following a low pass filter with a cutoff around 150 Hz.
Just do a period count, several times to avoid falsing, with the
microprocessor to determine the frequency of the incoming PL.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

Date: 28 Sep 1993 17:55:01 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: Regenerating PL tones thru a repeater.
To: info-hams@ucsd.edu

You may wish to examine the MX-Com series of communications ICs.
I don't recall the number offhand, but they have a subaudible
signalling decoder chip that has a lookup table of PL frequencies that
you can set, and it automatically decodes each of them. The
microprocessor attached to the chip can determine which one of the
frequencies is being used, and encode the appropriate tone on the
transmitter.

For a less sophisticated approach, the community repeaters that I used
to build used a simple set of tone decoders - the Com Spec boards, a
predecessor to the TS-32 - and a simple low-pass filter that allowed
anything less than say 150 Hz to pass through to the tone input of the
transmitter. This was called a 'tone coupler'. It has the distinct
advantage that the repeater doesn't have to have any special equipment
to accomodate 'reverse burst' or 'chicken burst' squelch tail
elimination.

Another approach is to simply use several TS-32 decoders and gate their
outputs into a common mixing input. That's a bit pricy, but will work
very well.

Finally, you might look around at the various used two-way radio
dealers and see if you can find a "community repeater panel", which
will be a bank of decoders and encoders that does exactly what you
want. I've seen them for like $25-$50 at swapmeets for one that will
do like 8 tones - which is really too few in today's commercial
systems. Community repeaters are dying off and being replaced by SMR
("trunking systems") these days, so you might even be able to find a
complete system you could use at a reasonable price.
     - Brian

Date: 28 Sep 93 16:28:42 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!charlier@network.ucsd.edu
Subject: T77C
To: info-hams@ucsd.edu

Keith Poole (kp2a+@andrew.cmu.edu) wrote:
: Does anyone know the QSL route for T77C -- Tony in San Marino?

T77C   Tony Ceccoli, Via Delle Carrare 67, RSM-47031 Murata,
            San Marino

--
Charlie Panek KX7L   Hewlett Packard Company
charlier@lsid.hp.com   Lake Stevens Instrument Division

Everett, Washington

Date: 28 Sep 1993 12:29:59 GMT
From: swrinde!elroy.jpl.nasa.gov!avdms8.msfc.nasa.gov!sauron!sims@network.ucsd.edu
Subject: TS-930S computer control hack?
To: info-hams@ucsd.edu

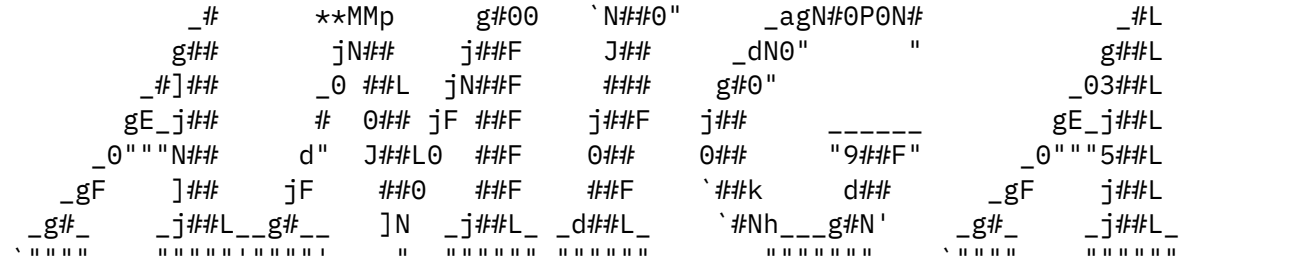
Well, the contest time is rolling around, and I was just wondering
if anyone out there knows of anyone who has designed and built
a hack for the kenwood ts-930s radio to allow computer interface?

Please e-mail direct.

Thanks,

Herb

W. Herb Sims sims@sauron.msfc.nasa.gov
KU0C sims@saruman.msfc.nasa.gov
MSFC/NASA/EB56 sims@avdms8.msfc.nasa.gov
Huntsville, AL 35812 PP-ASEL-IA



Date: 28 Sep 93 17:17:11 GMT
From: ogicse!uwm.edu!cs.utexas.edu!sdd.hp.com!col.hp.com!srgenprp!
glenne@network.ucsd.edu
Subject: which freqs will FCC sell?
To: info-hams@ucsd.edu

Bob Wilkins n6fri (bwilkins@iat.holonet.net) wrote:

: : 2,300-2,450
: now 2,300-2,310 and 2,390-2,450 loss of 80 MHz

: : 5,650-5,925
: no loss

: : 21,000-22,000

: : All above 40,000

: now moved up to 300,000 or 300 GHz

Bob,
 I wish it were *only* as bad you said. You forgot that 902-928 (our fairly recent "gift" from the FCC), 2.4 and 5.7 all got lumped into ISM and are now "computer CB". They are effectively unusable for some important applications. Also, the GHz at 21-22 got reduced to 250 MHz at 24-24.25.

  I'm personally feeling the effects in a big way. The dozen 256 kbps digital radios I built and (partially) deployed on 904.5 MHz now appear to be unusable due to trash generated by Part 15 and other junk (sorry, my bias is showing) devices which have come on in the 2 years since I first began testing.
  I'm now scrambling to find alternate sites and paths which don't have to run through what has become a cess pool through the middle of the SF Bay area. And wind profilers & Automatic Vehicle Location haven't even come on line yet!

  Currently, my digital links which would otherwise operate just fine, are having their packets blown apart by a 130 microsecond dwell, frequency hopping link of some kind. There's no question of the need to go to spreading and FEC now to make hardware work well in this environment. Unfortunately, I'm out of funds and energy to rebuild things.

  I knew the band was short lived but I was hoping that we'd get a little more life out of it. In hindsight, I probably should originally have put all of the radios on 1240-1300 MHz but the factor of 30 difference in power train component cost was *so* enticing.
  I think I can survive the 1 watt, omnidirectional Part 15 wireless LAN telephones and that sort of stuff since it is relatively low ERP but whatever the link is I'm seeing is a big signal; -60 dBm or worse.

  The shared 60 MHz at 1240-1300 is about our last hope if we want a wide area mid/high performance amateur network in our lifetime. That and 10 GHz are goldmines. Once again, amateur radio is dependent upon the military to keep us from losing some of our most valuable resource. Shades of 1914. As Yogi Berra might say "It's deja vu all over again".

Glenn Elmore n6gn

N6GN @ K3MC
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

Date: 28 Sep 1993 13:08:18 GMT
From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!haven.umd.edu!cville-srv.wam.umd.edu!ham@network.ucsd.edu
Subject: YAESU
To: info-hams@ucsd.edu

I have noticed that there is a trend of late. "ICOM" is spelled

I-C-O-M.

KENWOOD is spelled

K-E-N-W-O-O-D

ALINCO is spelled

A-L-I-N-C-O

while, on the other hand, 4 out of 5 users of ham equipment say

YAESU is spelled

Y-E-A-S-U   or   Y-A-S-E-U   or   Y-A-S-U-E

Look people, it's a guy's name, and I'm sure when he named the company,
he pictured people spelling his name right...

Y----A----E----S----U.

Yes, I'm nit-picking, no, I don't intend any hard feelings, and if I cause
any, it's because you realize you haven't been spelling it right and you
don't like people correcting you.

Guess I'll go hop into my Crysler :-) and go for a ride.
Anyone have a Cheby :-)?

Scott NF3I

--

73,   _________   _________ The
                                     \ / Long   Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00

    WAC CW/SSB WAS 95% of the way to DXCC _____________| Dipoles! Antenna!

End of Info-Hams Digest V93 #1150
****